

## Dairy & Livestock

# Consider grazing replacements

BY JENNIFER BLAZEK

**M**AYBE you've thought about grazing on your dairy farm. You may think your farm is too big or that grazing is just for organic farmers. Anyone at any scale or with any type of operation can graze. And the simplest and most cost-effective way to add grazing into your farm management is to graze your dairy replacements.

Grazing dairy heifers is not new and has been researched. Besides positive anecdotal evidence from farmers and custom raisers who already raise dairy replacements on managed pasture, Wisconsin dairy farmers in general see benefits to this management style.

Pat Hoffman at the University of Wisconsin Marshfield Agricultural Research Station surveyed dairy farmers on their views of grazing heifers. Nearly 75% of confinement dairy farmers held very or somewhat positive views about raising heifers on pasture. Also, 72% of traditional dairy farmers were very or somewhat positive about managed pasture.

### Decreased expenses

Raising replacement heifers is one of the biggest expenses on a dairy farm. For two years, heifers need feed, bedding, housing and veterinary care, all without paying for themselves. It's not until heifers start milking do they begin to pay their way on the farm. Grazing heifers up until freshening can reduce some of the costs related to raising them.

Implementing managed grazing of heifers on the farm means some upfront expense to take land out of grain production and establish permanent pasture. Other initial expenses include fencing, installing a water system and developing a managed grazing plan complete with lanes. Compare these costs to building a calf-housing facility that is 100% confinement. Taking into account all expenses related to managing heifers on pasture or in confinement, costs are less in the pasture system than in a confinement setting.

For example, in a study conducted by the University of Minnesota, a cost comparison over three years (2000-02) led to a daily average cost per head of \$1.28 for a feedlot system and 99 cents for a managed grazing system. While the difference seems small, this reduced cost translates

into greater net returns for the pasture system compared to confinement.

Grazing dairy heifers also nets a higher return than land used for other cropping enterprises. In the same study, the average return per hectare was \$264 for grazing dairy heifers. Other cropping enterprises had significantly lower returns: alfalfa hay at \$225, soybeans at \$76 and corn, which lost money, at negative \$76.

Wisconsin dairy farmers, regardless of type of dairy farm, believe heifers raised on managed pasture have better health and productivity. Research from UW-Madison and the University of Minnesota on dairy heifers backs this widely held belief, as it has shown that young animals on pasture can perform better than animals raised in confinement.

The growth, development and future productivity of dairy heifers are positively impacted by being raised on pasture. In the ongoing Wisconsin Integrated Cropping Systems Trial, heifers on managed pastures matched the weight and age at first calving of their confined counterparts. Heifers on managed pastures also outperformed the confinement heifers in terms of average daily gain during the pasture season and milk production in their first lactation. The pastured heifers had an average gain of 1.97 pounds per head per day, which is significantly higher than the 1.86 pounds per head per day for the confined heifers. The exceptional performance of heifers raised on pasture continued through to their first lactations. Pastured heifers in the WICST study produced about 2,000 more pounds of milk in their 305-day adjusted lactation than the heifers raised in confinement.

### Environmental impact

Cattle lots, barnyards and acreage in corn for grain and silage contribute most phosphorus loss and affect surface water. Cattle lots and barnyards alone account for 7% to 37% of total farm phosphorus loss since these areas can have high manure and animal densities, according to research done by the U.S. Dairy Forage Research Center. Grazing dairy replacements instead of raising them in confinement not only prevents soil erosion and sediment loss by establishing a cover on crop acreage, but also decreases manure concentration in areas at risk for runoff, such as barnyards and lots.



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Grazing dairy heifers also takes vulnerable land out of grain production and instead establishes a permanent cover. Due to the increased risk of soil erosion and sediment loss, cornfields are also potential sources for phosphorus loss during the winter and spring months when the main crop is not growing. This could result in significant watershed impact since for every ton of soil lost, 4 pounds of phosphorus leave the system. Research has shown that phosphorus loss on grazing land is low, only 1.2 to 2.4 pounds per acre.

There are numerous benefits to raising your dairy replacements on managed

pasture that translate into economic returns for your farm. As profitability margins get tighter, dairy farmers are looking for ways to cut costs without damaging animal health and production. Grazing dairy heifers instead of raising them in confinement systems can be one such management practice to improve your bottom line.

If you would like more information or assistance in developing a managed grazing plan for your dairy heifers, contact your county Extension office.

*Blazek is the Dane County Extension dairy and livestock agent.*

## Cooper wins teaching excellence award from UW-River Falls

**P**ROFESSOR Dennis Cooper of the University of Wisconsin-River Falls Animal and Food Science Department is one of three staff members who recently received faculty excellence awards following nominations from colleagues. Each recipient receives \$1,000.

Cooper, River Falls, won the 2015 Senior Keith Wurtz Award for Teaching Excellence for senior faculty.

The Wurtz award is designed to support innovators and those who demonstrate "trailblazing" characteristics

that may include innovative approaches to teaching, demonstrated scholarship of teaching and learning (publishing a journal article or textbook), innovative use of technology, curriculum development, effective assessment approaches and results, outreach, and partnerships with collaborators on- or off-campus.

Cooper "has played a significant role

in either instituting substantial pedagogical changes in, or outright development of, the department's core animal nutrition curriculum," a colleague wrote in a nomination letter.

Another colleague wrote that Cooper has "been effective in nudging students out of their perceived comfort zone and, as a result, has helped alumni develop into educated, global citizens," as he is "a very strong proponent of international study and involvement."

Another colleague wrote, "When Dr. Cooper educates dairy farmers in Serbia and in China, he is bringing innovation to those areas; as well as cementing international partnerships, he is teaching dairy producers in foreign lands to innovate within their local settings by virtue of his constantly developing, American, professional expertise."

*Source: UW-River Falls*



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